

**PANIPAT INSTITUTE OF ENGINEERING AND TECHNOLOGY**  
**PANIPAT**  
**Department of Civil Engineering**

**LESSON PLAN**

Semester: 6<sup>th</sup> Sem.

Faculty Name: Mr. Devender

Course Title: DSS-II

Course No . CE-302A

S.No.	Lecture No.	Topics to be covered
1.	L-1	Elementary Plastic Analysis and Design: Introduction
2.	L-2	Scope of plastic analysis,
3.	L-3	ultimate load carrying capacity of tension members and compression members
4.	L-4	ultimate load carrying capacity flexural members
5.	L-5	shape factor and load factor
6.	L-6	mechanisms
7.	L-7	plastic collapse analysis
8.	L-8	plastic analysis applied to steel beams
9.	L-9	simple portal frames
10	L-10	Design problems
11	L-11	Design of Water Tanks: Introduction
12	L-12	permissible stresses
13	L-13	design of circular Tank
14	L-14	rectangular tank
15	L-15	pressed steel tanks including staging.
16	L-16	Design of Steel Stacks: Introduction
17	L-17	various loads to be considered for the
18	L-18	design of steel stacks

19	L-19	design of steel stacks including foundation
20	L-20	Design problems
21	L-21	Towers: Transmission line towers, microwave towers
22	L-22	Design loads, classification
23	L-23	design procedure and specification
24	L-24	design procedure and specification
25	L-25	Cold Formed Sections: Introduction
26	L-26	and brief description of various types of cold formed sections
27	L-27	local buckling
28	L-28	concepts of effective width and effective sections
29	L-29	elements with stiffeners
30	L-30	elements with stiffeners
31	L-31	design of compression and bending elements
32	L-32	design of compression and bending elements
33	L-33	Industrial Buildings: Introduction
34	L-34	Loads, general arrangement
35	L-35	stability
36	L-36	design considerations
37	L-37	design of purlins
38	L-38	design of purlins
39	L-39	design of roof trusses
40	L-40	design of roof trusses
41	L-41	industrial building frames
42	L-42	Bracings. Stepped columns

(COURSE INCHARGE)

Total No. of Lectures Planned: 42